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REPORT

OF THE

Southern States Convention

COMMITTEE ON THE INCORPORATION OF CITIES AND VILLAGES,

ON THE BILL ENTITLED

AN ACT CONCERNING THE PUBLIC HEALTH

OF THE COUNTIES OF

New York, Kings and Richmond.



Transmitted to the Legislature, March 9, 1860.

ALBANY:
CHARLES VAN BENTHUYSEN, PRINTER.
1860

STATE OF NEW YORK.

No. 129.

IN ASSEMBLY, MAR. 9, 1860.



REPORT

**Of the Committee on the Incorporation of Cities and Villages,
on the bill entitled "An act concerning the Public Health of
the counties of New York, Kings, and Richmond."**

The committee on the incorporation of cities and villages, to which was referred the bill introduced by Mr. Jaques, entitled "An act concerning the public health of the counties of New York, Kings and Richmond, and for other purposes" respectfully

REPORT:

For several years past the Legislature has been memorialized by various societies and individuals of the city of New York, respecting its sanitary condition, representing that city to be subject to extraordinary sources of sickness and mortality, and asking for such alterations in the laws relating thereto, as will cause them to conform more nearly to the system pursued with such good results in other places.

The movement in relation to this subject appears to have originated in the New York Academy of Medicine, an association embracing a large number of the most distinguished physicians of our State, by whom, in 1856, the Legislature was petitioned for certain modifications of the Health Laws. In a memorial from that body, the opinion was there expressed that "a large portion of the annual mortality of this city results from diseases whose causes are more or less within control, but which are totally unchecked by any public administration of proper sanitary precautions, and that from this neglect, in addition to a very great and unnecessary loss of life, the city and State endure an incalculable detriment in their commercial and moral interests." Though such opinions and solicitations from citizens, who from their

professional pursuits are most competent and alone qualified to decide questions of this character, were entitled to great weight, yet the relief sought was not granted. The following year saw a renewal of the petition, strengthened by the presentation of facts of a most serious character relating to this subject, which further investigation had developed. No better success followed. In 1858, the low state of the public health, as it became better known to the inhabitants, aroused a more decided attention, and though the Legislature failed to grant the asked for boon, yet the Senate were impelled to appoint a committee to sit during the recess, for the purpose of investigating the subject, and to present the facts relating thereto, in an official form. The labors of that committee resulted in a report, which was presented February 3d, 1859. (Senate Doc., No. 49, 1859.) It is sufficient in this connection to say, that the investigation of the Senate committee fully sustained all the statements of the undue mortality of New York city, which had been alleged by the Academy of Medicine and other bodies, and, as an examination of that report will show, it presented an array of facts of the most extraordinary character, discreditable to the government of both city and State. Notwithstanding the proofs thus presented of the necessity of the legislation asked for, the bill nevertheless failed to become a law, though it passed the Senate by an almost unanimous vote, and lacked but three of the Constitutional majority in the Assembly. Under these circumstances this important question is again presented for the consideration of the Legislature.

An examination of the sanitary statistics for the year just past (1859), not only confirms all that has been alleged respecting the condition of the public health of the city of New York for the past ten or twenty years, but demonstrates further that it is still on the descending grade; that in comparison with many of the other principal cities on this continent, it is in a worse condition than any, as is shown by the following exposition of their

Ratios of Mortality to the Population :-

	Population.	Mortality.		Ratio.
Philadelphia,	620,000	9,745	one in	63.6
Providence,	52,000	982	"	52.9
Baltimore,	253,000	5,039	"	50.2
Boston,	180,000	3,738	"	48.1
Brooklyn,	250,000	6,206	"	40.2
New York,	800,000	21,645	"	36.9

An analysis of this table will show that had the public health of New York been on a par with that of Philadelphia, 9,071 of

the lives which were lost in the former city last year, with all the attendant expenses of their sickness and burial, with the incalculable amount of privation and suffering of families, together with the detriment to the State, which accrues upon every unnecessary and premature death, would have been saved; and not only this; if it be true, as stated by Dr. Playfair, (and of which there is good ground for belief,) that for every death there are 28 cases of disease, then there were in addition to the unnecessary loss of 9,000 lives, 253,988 people who last year suffered the pangs and cost of sickness, which under different circumstances would have been avoided.

A comparison with the other cities named in the foregoing list, shows a contrast, which, though less striking than in the case of Philadelphia, is still sufficient to demonstrate that New York, though the most favored by nature, by wealth, and by number of population, is the least favored in that consideration, which most effects her happiness, her pride and her prosperity, viz.: the public health.

An able statistician of New York,* who recently investigated its sanitary relations, has prepared the following table, showing the mortality of each ward. The first column gives the number of the ward; the second the population of the ward, according to the State census of 1855; the third the number of deaths in 1855, according to the city inspector's report; the fourth the number of deaths that would have taken place, if the mortality of the city had been no greater than that of the State at large, including the city; and the fifth column shows the actual excess of mortality in the city over the average of New York State:

Mortality of New York City and County, 1855.

Wards.	Population.	No. Deaths. City Inspector's.	No. Deaths by State Census.	Excess of Loss.
1,	13,486	632	180	452
2,	3,249	96	43	53
3,	7,909	169	105	64
4,	22,895	844	305	539
5,	21,617	944	288	656
6,	25,562	1,142	341	801
7,	34,422	1,189	459	730
8,	34,052	989	455	534
9,	39,982	1,054	533	521
10,	26,378	712	352	360
11,	52,979	1,735	707	1,028
12,	17,656	1,844	236	1,608
13,	26,597	973	355	618

* J. Smith Homans, Jr., of the "Courier and Enquirer."

Wards.	Population.	No. Deaths. City Inspector.	No. Deaths* by State Census.	Excess of Loss.
14,	24,754	776	330	446
15,	24,046	678	320	358
16,	39,823	1,153	531	622
17,	59,548	1,850	793	1,057
18,	39,509	1,374	527	847
19,	17,866	1,008	239	769
20,	47,055	1,682	627	1,055
21,	27,914	1,295	372	923
22,	22,605	939	301	638
Totals,	629,810	23,078	8,399	14,679

The same authority further tells us, that "the causes which make New York city so unhealthy, have the greatest effect upon the young. If we consider the mortality of Surry, in England, and London, of which we have accurate statistics, and compare them with that of New York, we find that festering London is health itself, and Surry a hygienic paradise compared with New York. In Surry, 10 children in every 86 under the age of one year died; in London, 1 in every 5; in *New York*, 10 in every 26; or in New York, the mortality is double that in London for children under one year old. In the pages from 1 to 5, the deaths in Surry were 1 in 33; in London 1 in 20; in New York 1 in 12, and so on through childhood." * * * * "The statistics are almost as unfavorable to New York if we take all ages. If we consider the United States and New York State and city, the mortality is shown as follows, proving New York State to be the most healthy:"

United States,	15	in 1000
New York State,	13.3	"
New York City,	36.5	"

The same writer gives the following table and remarks:

"It can be proven that the mortality in New York in 1854 was greater than in any city and at any period where life was valuable enough to be numbered. In 1857 it was greater than in: Hamburg, the great emigrant shipping port of Europe. On the other hand it is shown that the United States is the healthiest country in the world, and New York State the healthiest part of the United States. The mortality in the different countries is as follows:

New York State, (exclusive of N. Y. city,)	8.8	in 1000
United States,	15.0	"
England,	23.0	"
Denmark,	23.0	"
France,	23.05	"
Holland,	24	"

Sweden,	24	in 1000
Prussia,	28	"
Austria,	31	"
Russia,	36	"

With New York State having the *least* mortality of any state or country of its size in the world, we find that New York city has the *greatest* of any city, large or small. The deaths in New York State exclusive of New York city, in 1855, were 23,255, with a population of 2,836,400; the deaths in New York city in the same year were 23,042, with a population of 629,800. An almost equal number of deaths with one-fourth of the population."

Causes of Excessive Mortality.

But these facts are the more surprising, when we learn as we do from the official document already alluded to, (Senate Report) whence this excessive amount of sickness and mortality is derived, and that it is chiefly from the utter neglect of those public sanitary precautions and administrations, whose preventive efficacy modern science has established and demonstrated. We are instructed by medical men, that the public sources of disease (as distinguished from the strictly personal or individual) are divided into two classes: 1st. Those arising from causes external to the dwelling, and 2d, those from causes *developed within the dwelling*. To the former class, belong all such external influences as marsh miasms, and circumstances producing epidemics, such as yellow fever, &c., unconnected with the particular mode of living, and these are comparatively few in number. But to the other class belong a much larger array of diseases, equally fatal in character, and which are always found abundant in cities where hygienic measures are neglected. To the latter class, it is alleged, is due a large proportion of the great increase of mortality of the last few years in New York. The following tables, taken from the Senate Report, exhibit this fact in a most striking manner:

Table showing the Ratio of Mortality to the Population in New York for each decennial period, from 1804 to 1857, from Diseases due to or aggravated by Domiciliary Circumstances.

	1804 to 1810. One death in	1811 to 1820. One death in	1821 to 1830. One death in	1831 to 1840. One death in	1841 to 1850. One death in	1851 to 1857. One death in
Cholera infantum,.....	603	1,290	1,078	882	663	569
Cholera morbus,.....	11,000	4,500	8,300	9,300	7,424	5,887
Diarrhœa,.....	8,000	2,959	2,274	2,647	1,233	892
Dysentery,.....	2,743	898	1,106	2,077	815	893
Convulsions,.....	539	585	584	432	415	356
Erysipelas,.....	32,000	33,500	11,857	11,739	3,018	4,250
Dropsy of the head,	3,695	1,273	809	784	715	639
Marasmus and atrophy,.....	960	1,800	932	982	690	450
Scarlatina,.....	19,200	50,000	3,320	954	1,671	736
Measles,	13,714	4,573	2,305	1,552	2,861	2,226
Scrofula,.....	24,000	10,000	13,883	13,500	5,800	4,436
Premature and still births,.....	1,523	867	610	640	365	341

By this table, cholera infantum exhibits an increased ratio of 250 per cent in the last over the second period; cholera morbus of 100 per cent in the last over the first period; diarrhœa 1000 per cent; dropsy of the head 600 per cent, &c.

But the most striking instance of the unnatural increase of disease, is seen in the mortality from *congestion of the brain*, (occurring chiefly, though not exclusively, among the infantile population) as shown by the following figures, gathered from the city inspector's report:

Whole number of deaths from Congestion of Brain, in N. Y. City.

From 1804 to 1819, inclusive, (15 years,).....	NONE
" 1820 to 1838, " (18 years,).....	50
" 1839 to 1852, " (14 years,).....	477
" 1853 to 1855, " (3 years,).....	1,576

Many of the above enumerated diseases, it is asserted by the highest medical authority, are the direct result of crowding without ventilation, deficient sunlight, filth of person and domicil, cellar dampness and darkness,* innutritious and improper food, foul gases from sewers, street filth, &c., while the other maladies, though not immediately produced by these causes, are greatly aggravated in intensity and made more fatal by these circumstances.

Prevalence of Small Pox.

One fact alone would appear to show that New York city is utterly abandoned to the unchecked sway of disease, and this is, that the most easily prevented though the most loathsome of all diseases, small pox, has prevailed there without interruption or official interference, from the year 1822 to the present hour, although in that period it has destroyed the lives of about 9000 persons; and as it is fatal in only one in ten of those attacked with it, it follows that there were about 90,000 cases of it within that time, and yet we hear of no official effort to arrest its progress.

Mortality of children.

Of the 23,694 deaths in New York in 1858, 15,756 were children, the class peculiarly susceptible to the influences of foul air, bad food and want of light, and to which causes, undoubtedly, a very large portion of this slaughter of the innocents is due. "This number exceeded by 3,000 the entire population of the city of Poughkeepsie. It was equal to the population of the city of Oswego, and was 2,000 greater than the whole population of the county of Putnam. Of this number, 14,939 were children

* It is stated that nearly 20,000 people in that city live underground, in cellars.

under ten years of age — a number exceeding the entire infantile population of the same age in the counties of Richmond, Rockland, Putnam and Hamilton; 8,568 were under one year of age — a number nearly equal to the population of the city of Auburn in this State.

“According to the last census the following conclusions are deducible: If these 15,656 children had lived in Richmond county, but 10,829 would have died in 1858; in Rockland 9,587; in Putnam 7,696. If the 8,568 children which died under one year of age had lived in Rockland county, but 3,061 would have died during the same period; in Richmond 2,737; in Putnam 2,226.” (New York Journal of Medicine, Sept. 1859.)

Sanitary regulations of other Cities.

Your committee draw attention to these figures and facts, not so much for the purpose of asserting that a large portion of this city mortality might have been prevented (as is however declared by medical authorities), as to ask of this humane and intelligent Legislature whether such a state of things should be allowed to exist, without being satisfied that it could not have been prevented in part? — in other words, whether such an extent of depopulation should be allowed to continue a day longer than is necessary to establish such a supervision over it, as will satisfy the demands of a suffering people, and sanitary science, that all is done that can be done to arrest it.

In searching for the reasons for this unusual, and in this country unprecedented condition of the popular health, in asking why the largest city of the western hemisphere should give such an extraordinary mortality, when cities but a few hours distant, in no better localities, inferior in topographical and climatic position, and in facilities for drainage and abundance of pure water, present examples of the highest degree of salubrity; the answer comes from various quarters, but all of the same purport, *the almost entire absence of scientific sanitary supervision.*

A comparison of the sanitary arrangements of New York with those of other cities, will explain the secret of the cause.

The *sanitary police of London* is composed (under a central board of health, appointed by the general government,) of one principal medical officer (at present one of the most distinguished physicians of the realm), subordinate to whom are 32 medical men, who have the direct supervision and execution of sanitary matters in their respective districts. Under the laws prohibiting

cellar residences, licensing lodging houses, removing nuisances, requiring ventilation of tenements, &c. &c., that city has, under the administration of this medical corps, from being one of the most unhealthy, become one of the most salubrious. It is but proper also to state, that under recent acts of Parliament, an unusual and most salutary stimulus has been given to the *popular consideration* of the public health, besides by direct sanitary laws, putting into the hands of medical officers in every town, village and district, power to remove the sources of disease of whatever kind and wherever found. The salutary effects of these measures are becoming, every day, more and more apparent in plainly decreasing mortalities, and a corresponding increase in the happiness and morals of the people.

The *sanitary arrangements of Paris*, while marked by the precision and subdivision of duties which characterize the French mode of government, are nevertheless based upon medical science and experience, aided by other measures of sanitary application, such as architecture, engineering, &c. The sanitary affairs of each *arrondissement* (or ward) of the city of Paris, (15 in number, including three rural districts) are supervised by a "*Commission of Public Hygiene and Health*," composed of nine persons selected and appointed in the following manner :

"The members of these commissions shall be named by the prefect of police, from a list of three candidates, presented for each place by the mayor of the *arrondissement* in Paris, and by the sub-prefects of Sceaux and St. Denis in the rural *arrondissement*.

"The candidate shall be chosen from among the notable inhabitants of the *arrondissement*. In each commission there shall be always, at least two physicians, one pharmacist, one veterinary, one architect and one engineer. If there are no candidates from the three latter professions, preference must be given to mechanicians, manufacturers, or directors of manufactories."

In addition to these commissions established in each ward or *arrondissement*, there is over all a "Council of Public Hygiene and Health for the Department of the Seine." This council consists of 29 individuals, of whom 15 are physicians, 6 are pharmacists, and the remaining eight are either engineers, architects, or possessed of some other appropriate qualification. This central body decides upon the propriety of the execution of sanitary

measures recommended by the local commissioners; it is in fact, the central board of health for the whole department of the seine.*

Returning to our own land, we find the public sanitary arrangements of nearly all the principal cities of the neighboring States partaking in a greater or less degree of the medical element as the true basis of operations. From the smallest of the cities enumerated in our first table, (Providence,) to the largest, with the exception of New York and Brooklyn, the administration of the laws relating to the public health, is confined wholly or in part to medical men.

The board of health of Philadelphia, is composed of 12 persons, five of whom are physicians of distinguished reputation for scientific attainments, and especially as sanitarians. The affairs of quarantine, and the management of the Lazaretto Hospital, are also confided to the board of health.

The sanitary affairs of Boston are supervised and directed by medical men of high standing. The same is to be said of Providence; and it is but justice to the principal medical officer of the latter city, Dr. E. M. Snow, to record in this place the service he has rendered to the cause of sanitary improvement and protection, in having by his vigorous measures, actually arrested the spread of small pox in that city, before the occurrence of the twelfth case, when it appeared there in January, 1859, for the first time in several years, having been imported by a merchant, who had visited New York in pursuit of business, and there imbibed the poison by some unknown means.

The last instance your committee will cite is the city of Baltimore, whose board of health consists of three persons only, *all*

* The following extracts from the decree of 1848, show the range of duties pertaining to these councils of health, and the matters upon which they may be especially consulted by the prefects and sub-prefects of police:

- 1st. The purification of localities and habitations.
- 2nd. The measures necessary for preventing and combatting endemic, epidemic and transmissible maladies.
- 3rd. Epizooties or diseases of animals.
- 4th. The propagation of vaccine.
- 5th. The organization and distribution of medical aid to the indigent sick.
- 6th. The means of improving the sanitary condition of the industrial and agricultural population.
- 7th. The salubrity of workshops, schools, hospitals, insane asylums, benevolent institutions, barracks, arsenals, prisons, alms houses, &c., &c.
- 8th. The questions relating to founding children.
- 9th. The quality of food, drinks, condiments and medicaments of commerce.
- 10th. The improvement of mineral water establishments belonging to the state and to individuals, &c., and the means of rendering them accessible to the sick poor.
- 11th. Demands for the authorization, removal, or suppression of dangerous, unwholesome or disagreeable establishments.
- 12th. Great works of public utility, the construction of edifices, schools, prisons, barracks, gates, canals, reservoirs, fountains, halls, markets, pools, gutters, cemeteries, highways, &c., in their relations to public health.

medical men, whose devotion to their noble duties has preserved to their city a high sanitary reputation. In addition to the board of health, thus professionally constituted, there is also in each ward a medical officer, who performs the duties both of vaccine physician and health warden.

The board of health of Baltimore have also, in addition to their duties as city sanitary officers, the general charge and supervision of the affairs of quarantine, the control of the marine hospital, and authority over the landing and removal of cargoes and vessels, so far as the same may affect the public health.

Your committee might adduce other instances of large cities, in which the control of both their internal and external defences against disease is confided to medical men, *and in every case with the most salutary and economical results*; but they have mentioned enough, they think, to satisfy any unprejudiced mind, and they have yet to hear of the first instance of failure or dissatisfaction on this account.

Health arrangements of New York and Brooklyn.

With these principles and their practical results in view, your committee next ask attention to the protective health arrangements of the cities of New York and Brooklyn, the largest in our State, and the first and third in the Union in size.

We have alluded to the absence of any internal sanitary supervision in New York, and yet, in that municipal government, there are three separate and distinct departments, appointed to exercise a care over its public health, each independent of the other, and fully supplied with law upon the subject. They are,

First.—The *Board of Health*, composed of the Mayor, Aldermen, and Councilmen, *ex-officio*.

Second.—The *Commissioners of Health*, consisting of six individuals.

Third.—The *City Inspector's Department*, comprising the City Inspector, twenty-two Health Wardens, a Bureau of Sanitary Inspection with twenty-two Street Inspectors, a Bureau of Records and Statistics, a Bureau of Markets, and a Bureau for the Inspection of Weights and Measures.

The number of individuals thus directly and indirectly concerned in the care of the public health, is about one hundred and twelve, yet we shall show that there is not one who feels it to be required of him to use any effort whatever to check the diseases which annually carry an excess of many thousands of the people to the grave.

The members of the board of health are elected without the slightest reference to sanitary matters; they are simply Aldermen and Councilmen, without a medical man among them. Moreover, they have no power to come together except at the pleasure of the mayor; and when he has once called them together, they may keep themselves in perpetual session, he having no power to adjourn them; he has no veto upon their acts, however extravagant they may be; and though the whole board consists of forty-two individuals, ten of the number constitute a quorum to do what they may choose, under color of protecting the public health.

With regard to the health commissioners, their duties pertain solely to quarantine affairs, and to seasons of epidemic in the city. "They" have no power to regulate the sanitary inspection of the city.**

Respecting the city inspector's department, a late head of it himself declared before the Senate committee, "I believe that, inasmuch as this professional knowledge is in no manner connected with the duties of the office of city inspector, directly or indirectly, I hold it to be perfectly ridiculous to urge the idea of a medical qualification."† In another place, he says, "I am quite confident that the city inspector has not been called upon to exercise the knowledge of a medical man in the discharge of his duties; nor do I conceive that the theory of our laws, (and I do believe them to be the most perfect set of laws for the sanitary regulation of any city in the Union ever contemplated,) requires the city inspector to be a medical man; but, on the contrary, it never was contemplated that the duties of the city inspector were to be of a professional character."‡ The superintendent of sanitary inspection also declared, that, in the discharge of his duties, he "never yet felt the loss of a medical education."

Admitting for argument's sake, the correctness of the opinions as above expressed by the late city inspector, that "*the health laws are the most perfect for the sanitary regulation of any city in the Union ever contemplated,*" the question naturally rises to the mind, why then is it, that the city possessing such laws, has the heaviest proportionate mortality of all? Your committee think an answer may be found in a single fact connected with the administration of those laws; an answer which is indeed shadowed forth in the same testimony, from which the above opinion

* See Dr. Rockwell's testimony before the Senate committee, page 128.

† Idem, p. 161.

‡ Idem, p. 163.

is taken, viz.: That the execution of them has not for many years, been confided to minds competent to appreciate either their nature or their value. From the year of its organization, about 1804, till 1844, the city inspector was almost invariably possessed of a medical education. All political parties alike recognized the claims of medical science in the administration of the duties of that office, and made their appointments accordingly. But since that period, the incumbents have invariably been without the requisite medical knowledge, and it is a remarkable, and has proved a mournful coincidence, that very soon after this change of policy in respect to that department, commenced that extraordinary exodus from several European states, which, within the last twelve years, has brought to the port of New York, over two and a half millions of people, including those from famine stricken Ireland, with the terrible accompaniments of typhus fever and small pox. Thrown thus suddenly into that city, hundreds of thousands of these destitute and diseased people, if they found a "most perfect set of laws," yet found no proper administrator of them. They crowded the existing dwellings to a degree unprecedented, but no sanitary officer was there, to prevent the extension of the maladies imported with their persons. Left wholly to themselves, without even a show of sanitary supervision, thousands of those poor people not only found premature graves where they should have found healthful homes, but they carried down with them hundreds of their relatives and friends, who with outstretched arms had received them. Nor was this the only or worst result. The demand which was thus created for more house room, gave a renewed impetus to that peculiar system of domicils known as the "tenement house," which has since become so marked a feature of the city of New York, and the evils of which have elicited elaborate reports from committees of the Legislature, and the recent conflagration of some of which, with attendant losses of life has startled the feelings of the whole country. (See appendix A.) These effects have all transpired under the eyes of officers, who unfortunately possessed neither the knowledge nor the foresight necessary for such emergencies; and although the number of alien arrivals has fallen from 312,000, the highest point in one year, to less than 78,000 in 1859, yet the same absence of supervision, and the same official deficiency of sanitary knowledge continue.

Another important fact, relating to the city inspector's department must not be overlooked in this place. Notwithstanding its

duties in relation to the public health were thus neglected, yet there were added to it, from time to time, several other functions of entirely incongruous character. Through what influences, or for what purposes these additions were made, your committee will not stop to consider, but from the report of the Senate committee before referred to, we quote the following eminently just and appropriate facts and conclusions :

"The "City Inspector's Department" now embraces within its functions four several and distinct spheres of duty :

"*First.* It has the care and supervision of the public health, including the inspection and removal of nuisances, the control and prevention of disease, the registration of births, marriages and deaths ; and its chief officer is, moreover, one of the commissioners of health, and an official adviser of that body in all matters pertaining to the public health.

"*Second.* It has the charge of the cleaning of the streets of the city, including the employment of laborers, the selection and supervision of dumping grounds, the sale of manure, and other matters pertaining thereto, of a financial character, to the extent of from \$300,000 to \$400,000 annually :

"*Third.* It has the regulation and management of the public markets, eleven in number ; and,

"*Fourth.* It is charged with the duty of the inspection of weights and measures.

"It is plain that the first of these multifarious obligations, the supervision of the public health, involving the preservation of the people's lives by the discovery and suppression of preventible diseases, is the most important and serious that can engage the attention of the officers of the department in question. Embracing, as it does, the great subject of public hygiene or sanitary science, in view of the health and lives, not only of the 750,000 persons which constitute the probable present population of New York city, but also of the future millions by whom the island of Manhattan is destined to be inhabited, making it the chief city of the world, this subject is too grand, too far reaching, too vital, to be subjected to any diversion, or to be encumbered with any extraneous matters whatever.

"The duties of a health department in such a city as New York, if properly constituted and arranged, would possess a magnitude and importance sufficient to occupy the time and talents of the best educated men to be found in the ranks of the medical profession. None other than such should be entrusted with so

delicate and responsible a service; none other can perform it with proper efficiency, and when selected they should be relieved of every extraneous duty.

"The public health department of such a community should stand alone; it must stand alone, in its responsibilities and labors; and it is a manifest absurdity, wrong in principle as it will always prove injurious in practice, to place in the same hands such an incongruous variety of occupations, all, or nearly all, of an onerous character, as we find combined in this one department as now constituted. It is impossible that duties so incompatible with each other and so extensive can be efficiently supervised and directed by a single head, for the first one enumerated alone requires the study of years so to inform and perfect the mind as to enable it thoroughly and properly to understand and appreciate the multifarious features and bearings of so vast a subject."

Opinions of the Local Authorities.

Your committee think there is thus demonstrated a necessity for a thorough change in the arrangements of the health department of the city of New York, so as to elicit a more active and intelligent supervision and execution of the important provisions of law committed to it. Should there be still in any mind a doubt of this necessity, that doubt must be removed upon the perusal of the following opinions, expressed by the public authorities themselves.

The following paragraph is from the published "Report and proceedings of the Sanitary Committee of the Board of Health, in relation to the cholera, as it prevailed in New York in 1849," of which committee His Excellency E. D. Morgan, the present governor of the State, was an active and efficient member, and is among the signers of the report:

"The labors of your committee during the past appalling season of sickness and death, and the awful scenes of degradation, misery and filth, developed to them by their researches, have brought into full view the fact that *we have no sanitary police worthy of the name*; that we are unprotected by that watchful regard over the public health which common sense dictates to be necessary for the security of our lives, the maintenance of the city's reputation, and the preservation of the interests of the inhabitants. Cholera may again assail us before we know it, and it is the dictate of true policy to be prepared in season to meet it; and not cholera alone, but any and every other malady which may be produced or aggravated by local causes. To no other

work should the authorities address themselves more earnestly than the *establishment of a thoroughly organized medical police, at whose head should be an active and experienced medical man.* The advantages of such a measure would be incalculable." Pages 36, 37.

The following resolution was adopted and ordered to be transmitted to the Legislature by the board of supervisors of New York, March 30, 1858 :

"*Resolved*, That in the opinion of this board, an imperative necessity exists for such improvements in the details of the city inspector's department, and in the qualifications of its executive sanitary officers, as are dictated by the modern progress of science; and that a legislative enactment to this effect would add greatly to its usefulness and efficiency, and meet with the approval of the great body of our fellow citizens."

Lastly, the subject of sanitary reform in the city of New York, was brought to the notice of this Legislature by His Excellency the Governor, in his last annual message in the following words :

"I recommend to your careful attention the highly important subject of the public health, especially in the city of New York. A considerable personal experience obtained in an official capacity during the prevalence of epidemic cholera in 1849, convinced me that the absence of scientific sanitary supervision was even then a great defect in its municipal organization."

The non-professional character of the head of the department, is of course not improved upon in the subordinate incumbencies, and your committee believe, that to convince the Legislature of the necessity of a sanitary reform it is but necessary to state the fact, that of the health wardens now in office, and charged with the responsible duty of detecting and combatting the subtle source of disease in their respective wards, not one makes claim to any scientific or practical knowledge on the subject, as the following enumeration of their occupations will show :*

Of the twenty-two, one is a clerk, one a speculator, one an emigrant runner, one a bar-keeper, one a policy dealer, one a plumber, one a stone mason, two brick layers, one a ship carpenter, two house carpenters, one a hatter, one a laborer, one a livery stable keeper, one a barber, three rumsellers, one a carman, one a butcher, and one until his appointment as health warden, had no business occupation.

Such then, in brief, is the condition in respect to health, to

* Vide an address by Henry Guernsey, M. D., by whom the facts were obtained.

which that section of the State has been brought, by force of the very circumstances which have made it the commercial metropolis, conjoined with an entire absence of any healthful supervisory regulation by experts in sanitary science. The evils which have thus from small beginnings, been suffered to grow till they have become oppressive burdens, *must* be removed, or the inevitable result will be desolation by cholera, by typhus fever, by yellow fever, by small pox, by the plague, or some other inchoate evil, not excepting conflagration from this range of possibilities, as was the case with London in 1666, following the loss of 80,000 by the plague in the preceding year, and as New York has already had warning by the loss of numbers of the helpless occupants of two of the notorious tenement houses. Your committee forbear to enlarge any further, in this place, upon the extraordinary facts respecting the character of a large part of the dwellings in New York which have been brought to their attention, but refer to the appended "Report on the domiciliary accommodations in the city of New York," made to the New York Sanitary Association. See appendix B.

Pecuniary Economy of Health Measures.

It requires no argument to show the truth of Franklin's saying, that "public health is public wealth," yet its practical importance appears to be too generally disregarded.

In the city inspector's report for the year 1850, it is stated that the loss in that year of more than five thousand of our citizens, and more than ten millions of dollars, might have been prevented, had the laws of life and health, the causes of disease, and the means of prevention been more known and observed.*

In his report for 1851 he says further: "We had 7,340 deaths in the city of New York in the year 1851, *which might have been prevented.*" Again he states that, "according to the rules of Mr. Farr, the Registrar General of Great Britain, it has been established, 'that the proportion constantly sick in a population, is double the annual proportion per cent, which the deaths bear to the living in that population.'" And he states that "According to these rules, 15,040 were constantly sick during the past year *unnecessarily.*"

Basing all his calculations upon the high and admitted authority of estimates given by the Registrar General, and the Health of Towns Commissioners of Great Britain, the city inspector arrives at the startling conclusion that the pecuniary loss incurred

* See document 23, p. 467 Common Council, New York, 1851.

by unnecessary or preventable sickness and mortality, without attempting any pecuniary estimation of a human life itself, amounted during the year 1851 in that city, to the enormous sum "of thirteen millions six hundred thousand dollars."* Astonishing as such an aggregate estimate must appear, to any mind not already familiar with the facts relating to sickness and mortality, in the metropolis of our State, your committee are convinced of its correctness.

On the score of direct economy in the public expenditures, your committee have no doubt that the enactment of the proposed bill will prove eminently advantageous. However honest and well intentioned men may be in the discharge of official duties, there must inevitably be extravagance and waste, when service is rendered in ignorance of the true nature of the duties, or the best means of performing them. From the budget of the Comptroller of the city of New York for 1860, we learn there is asked for the board of health, the city inspector's department, and the commissioners of health, the enormous amount of \$504,715.† In the hands of properly qualified individuals, cumbrous and imperfect as the health arrangements are, that sum would doubtless much more than suffice for a greatly improved state of the public health, while with the more perfect arrangements proposed, there can be no reasonable doubt of a very considerable saving in the expenses of the department.

Moral Economy of Health Measures.

The physical vigor of the people is one of the strongest defences against pauperism, bankruptcy and demoralization; and how shall we estimate by any pecuniary standard the far reaching and deplorable consequences of physical debility to the political, social and moral welfare of a community or a nation.

Turn which ever way we will, we see the intimacy, we might almost say the mutual dependence of health and morals, of physical vigor and political prosperity. Our ablest political economists urge the importance of legislative attention to these vital considerations which the directors of the great religious and eleemosynary charities of the city and vicinity of New York, have for years made a principal burden of their reports and plans.

In the annual report of the "New York Association for improving the condition of the poor," for the year 1858, we find the following language:

* See City Inspector's Report for the year 1852.

† Doc. No. 34, Board of Aldermen, Dec. 7, 1859, page 85.

"It is the concurrent opinion of all who are engaged in domiciliary visits to the poor, as dispensers of either medical, eleemosynary or religious aid, that an intimate relation exists between their sanitary and moral condition; that the prevalence of filth and foul air give rise to sickness, destitution, vicious habits, and crimes of every grade; and hence, that there is no greater want in this city than of a well organized, intelligent sanitary police, empowered to enforce the true principles of sanitary law." Again it is stated in the same report that "without more effective exertions than have yet been made to improve the wretched domiciliary condition of large masses of our population, it is to be feared that most other efforts for their benefit, however faithfully prosecuted, will signally fail of their object."

In the report made to the Legislature in 1857, by a special committee appointed "to investigate the condition of tenement houses and their occupants," we find many conclusive facts that painfully illustrate this view of the subject before us:

"In one building, one hundred and ten families are gathered, some of them numbering eight or ten members, occupying one close apartment, and huddled indiscriminately in damp, foul cellars, to breathe the air of which is to inhale disease. Here, in their very worst aspect, are to be seen the horrors of such a mode of living. * * * * Indeed, no language could faithfully depict the sufferings and misery witnessed, even in the hurried visits paid by the committee, to these hot-beds of immorality, drunkenness, debauchery and disease."

Again. "In the houses visited by your committee, sights were presented to them alike startling and painful to behold. * * * Young faces, haggard with want, and bearing that peculiar look of premature age imparted by early sin, peered at them from every corner; misery and vice in their most repulsive features, met them at every step. Scarcely an apartment was free from sickness and disease; and the blighting curse of drunkenness had fallen upon almost every family. * * * Health failing them, want will follow; and then must come rapidly crowding upon them, neglect of home, neglect of children, uncleanness, drunkenness and sin. This is no fancy sketch, no picture of the imagination. It is a stern reality, enacted every day in the midst of luxury and wealth; the natural and fearful result of the rapacity of landlords in an over-crowded city, unrestrained by conscience, and wholly unchecked by legislation.

"There is, moreover, no municipal medical board that takes

legal cognizance of the mischiefs under consideration, nor an intelligent medical police to execute existing sanitary ordinances, so as to supplement the insufficiency of mere moral force. But conceive of the union of these various forces, imperatively demanded by the highest social and moral considerations, of which there are already foreshadowings, and the sanitary condition of this metropolis, will no longer be a by-word and a reproach."

Influence of Emigration on Mortality.

The assertion is frequently made, and has been recently repeated in a semi-official form, that the extra mortality of New York, (and the same remark will apply as well to Brooklyn,) is due to the influx of unacclimated foreigners, "that emaciated from long and tedious voyages, perhaps half fed, the emigrant goes into some small apartment, where a breath of fresh air scarcely ever enters, with, perhaps, improper medical aid in very many cases, and often a total want of nourishing food such as the system absolutely requires, he dies, and in this manner hundreds of deaths are annually added to the death statistics of New York."* To this apology for the excessive death pressure upon the population of New York, we find answer, that however correct such allegations may have been in former years, there was, as we have already shown, no sanitary system in operation, as *there should have been*, to meet these emergencies; but that for the past five years, the alleged causes have in a great measure ceased, though the proportionate mortality has not diminished. The immigrant arrivals of the present day are not only greatly reduced in number, (to nearly one quarter as before stated,) but there is a corresponding improvement in their character and circumstances, while in no other city in our country or in the world are the natural advantages for health greater; in no other is there such a perfect system of medical relief for the poor; in no other maritime city is labor better compensated; and nowhere else is the emigrant stranger so promptly and so well provided for in sickness and destitution; the arrangements and facilities of the commissioners of emigration being so ample, that the immigrant sick and destitute would appear to fare better than the same classes of the native population.

While concurring in the statement of the baleful influence of the apartments into which the immigrants are thrown on arrival, the deficiencies of fresh air, &c., all these but demonstrate the necessity of a radical change in the sanitary arrangements of the

* Vide letter of the Register of Record to the City Inspector, January, 1860.

district, especially as the same writer tells us in the same communication, that "in my (his) opinion, it is very difficult to make any very marked change, for the reason that there are so *many* extraneous causes which are exceedingly difficult to alter." Let the Legislature at least make the effort at improvement, let it make a beginning with some of these "many extraneous causes," and if the experience of other and worse places is of any value, we may yet hope to see the pride of our State redeemed from this disgrace which now weighs heavily upon her.

A reference to the last annual report of the superintendent of the depot for immigrants, at Castle Garden, under the care of the Commissioner of Emigration, shows, that of the arrivals last year, probably not more than three per cent remained in the city of New York, and as the adults form a very large proportion of the passengers, the mortality among them is now very small indeed.

Brooklyn.

These statements respecting the sanitary condition of New York, apply also, though with diminished force to the city of Brooklyn. The mortality of the latter city, as will be seen by a reference to the first table given in the report, stands only next above New York. In its geographical and topographical relation it surpasses, if possible, that of its elder sister, and being much less densely populated, and in great measure free from the circumstances which have so greatly depreciated the reputation of the latter for salubrity, it enjoys a much better standing in this respect. But already it is beginning to feel the unhealthful influence of its proximity to New York, in the gradual encroachment of the evils which affect the latter. Though less confined in area, and far less densely inhabited, yet the baleful *tenement house* system already shelters, according to recent police returns, no less than 76,000 of its inhabitants. Like New York it has no sanitary supervision, except what is provided in a single officer, denominated "health officer," (and he not necessarily by law, a medical man,)* who has not one professional assistant, all the sanitary inspection and execution, for which a keen medical acumen is alone competent, being performed by members of the ordinary police force. Without the early introduction of a sanitary system, equivalent to that proposed in the accompanying bill, the evils alluded to must inevitably increase; with its aid Brooklyn may be raised to a standard of salubrity unsurpassed.

* Brooklyn Ordinances, title III, page 24.

The Metropolitan Health District.

The accompanying map shows the area of the health district* proposed to be formed, comprising the three counties immediately adjacent to the Narrows and New York bay. These are all directly exposed to the diseases which approach seaward. Every summer brings its apprehensions of yellow fever to the people of all these shores. Since the great epidemic of yellow fever of 1822, scarce a year has passed in which it has not appeared at quarantine, and its extension to New York and Brooklyn only prevented by a rigid enforcement of the quarantine laws; nevertheless, in 1856 we have seen it sweeping the shores adjacent to the Bay and Narrows, as indicated by the yellow tinted spots upon the map; and in September, 1858, the fears and consequent excitement of the residents of Staten Island, found their culmination and vent in the destruction of the Marine Hospital. The appearance of yellow fever in Brooklyn in 1819, of Asiatic cholera in 1832, 1834, 1849 and 1854, of typhus or ship fever at various and protracted periods during the present century, and the continued presence of small pox in both cities, demonstrate that however these three counties are separated municipally and politically, yet in their commercial and sanitary relations they are one and indivisible.

Importance to the State and Country of a sound condition of Health in the District.

A sound state of the public health in the district proposed by the bill, is a question of great importance, not only to the inhabitants of the district itself, but of scarcely less to all the rest of the State, and indeed of all the other sections of the Union, for it is the commercial centre of the State and country. The million of people residing in that district, are but a fraction of the numbers who are dependent upon and connected with it in numberless relations. The \$15,000,000 to \$20,000,000 worth of clothing which is there made up from the rude material, and distributed through dealers to almost every town and village of the land, is but one item of the long list of personal connections which the people of the country bear to the people of that district; and when it is remembered that the hands by which much of the clothing is manufactured, may be covered with the pustules of small pox, or that it may be made up in rooms which are at the same time, the work-shops and chambers of people afflicted with that or some other contagious disease, it is at once seen how inti-

* Except small parts of New York and Richmond counties.

mate and extensive are the interests which the whole country have in its sanitary integrity.* The enforcement of preventive sanitary measures therein by the Legislature, is therefore but a measure of protection to their constituents throughout the entire State.

Quarantine.

As it appears to be admitted on every hand among scientific and practical men, that in the present state of universal commercial intercourse, even the most efficient quarantine cannot afford absolute protection against imported infections, unless the internal *localizing* causes of such epidemics are prevented by proper sanitary arrangements. From the earliest epidemics of yellow fever, to the present time, and whenever exotic or indiginous pestilence has prevailed in the city of New York, we find it claimed by the highest medical authorities there, that the great and peculiar source of danger at such times, was the local or domestic condition of insalubrity. While the importance of quarantine restrictions against exotic diseases cannot be doubted, it is a generally admitted fact that such restrictions *alone* cannot be relied upon as sufficient, unless the local hygienic regulations and an efficient sanitary police within the city, vigilantly guard against the localizing causes, and the earliest germ of the maladies.

The first great advocate of our quarantine regulations, the first health officer of Staten Island, the distinguished Dr. Richard Bailey, declared that New York may be rendered as healthy a city as any place under the sun; and when a more rigid (sanitary) police prevails and the nuisances with which the city abounds are corrected, you will hear no more of the ravages of particular diseases. Uniform and very decided testimony is borne, that the regulations of quarantine and the internal sanitary regulations of the city, should harmonize and mutually strengthen and insure the guards, which each afford for the protection and improvement of the public health. And it is further, and with great reason claimed by all good authorities, that by such harmonious working and general improvement, of both internal and external sanitary police of the port of the city of New York, will the embarrassing restraints imposed upon commerce be most safely and certainly ameliorated. Hence the committee do not hesitate to approve the clause relating to quarantine, as found in section three of the proposed health act. The propositions of that clause seem to be eminently honorable and just, and we believe they meet the views of the highest

* Vide Senate report. Testimony of John McNulty, M. D., p. 56.

156
12W^d

Map showing the relative and absolute mortality in the 18 Wards of the City of New York, from the CHOLERA of 1849.

The Figures indicate the number of deaths by Cholera, & the dates show the appearance of the first case in each Ward

778
16W^d
June 23

151
18W^d
June 5

101
9W^d
June 6

80
15W^d
WASHINGTON SQUARE

151
17W^d
June 5

248
11W^d

146
8W^d
June 4

156
14W^d
June 5

155
10W^d

324
13W^d

165
5W^d

880
6W^d
May 11
5 points

255
7W^d
May 24

81
3W^d
PARK

674
4W^d
May 31

87
2W^d
May 28

311
1W^d
May 31

N
O
R
T
H

O
R

H
U
D
S
O
N

R
I
V
E
R

JERSEY
CITY

E
A
S
T
R
I
V
E
R

B
R
O
O
K
L
Y
N



medical and civic authorities on the question which these propositions involve.

It will be observed that the bill contains no proposition that can interfere with the appointment or the legitimate executive functions of the health officer of the port, who will of course continue as heretofore to receive his appointment from the Governor of the State, and will exercise all the executive functions now by law required of that officer.

Asiatic Cholera.

The annexed Map shows the ravages of cholera in New York in 1849. The varied intensity of the disease in different localities is represented by the varying depths of the dark shade. Those familiar with the localities, will readily perceive the coincidence of domiciliary crowding and filth, and the greater intensity of the disease. It commenced at the "five points," (6th ward,) and thence spread to other parts. The 15th ward, although near the centre of the city of the affected area, from its more cleanly and less crowded condition, suffered least of all.

The mutterings of another storm have already reached us from across the Atlantic, and it has appeared, though in but a single case, during the past season at quarantine. While all unnecessary alarm on this subject should be avoided, yet the plainest dictates of prudence bid us prepare for any emergency, and from the descriptions given us of the two principal portions of the proposed health district, they were never in a condition more fitted for the easy reception and promotion of that fearful scourge, against which thorough domiciliary and civic cleanliness and purification are the only safeguards.

The question then returns to us, shall this state of affairs be permitted to continue and grow worse, as of necessity it must, if not interfered with? Shall it be left to the local officials, who have shown themselves utterly incompetent to the duty, to continue to enjoy the emoluments of office—offices which of all others should be held sacred to the cause of humanity—while the people are dying around them, when their lives might be spared? or shall the Legislature, by its strong arm, step in to rescue them from the pangs of unnecessary sickness and premature death? Can the supreme authority of the State reconcile it with duty, to permit another day's existence of these evils, with the terrible threatenings of which history gives ample warning?

In the opinion of your committee no bill has ever been presented to the Legislature, based upon sounder views of public

policy, or more urgently demanded by the welfare of the people, than the health bill which we have now the honor to report for the action of the House, and earnestly recommend its speedy passage into a law.

ELIAS POND,
E. H. DOWNS,
L. D. COLLINS,
WM. C. JONES,
S. A. LAW.

(A.)

APPENDIX.

That the Legislature may have an idea of the real character of a large number of these tenement houses, we quote from a paper recently read before the New York Sanitary Association, by Henry Guernsey, M. D., the following graphic account, drawn up from personal observation by that gentleman :

"The sanitary survey of the Mangin street portion of the Manhattan barracks, situated between Delancy and Rivington streets, presents two rows of barracks, three stories high, with three court yards running east and west, each row containing 24 apartments, each apartment two rooms 8×10 feet, and a dark bed room 6×7 feet; the height of ceiling is 8 feet; width of stair-way running straight to top of the house 2 feet 8 inches. The whole number of rooms is 72, four unoccupied. In these barracks are 70 families, nearly all German, the number in all being 282, viz.: 144 adults, 138 children, besides 11 dogs and 15 cats. 43 stoves are daily giving out carbonic oxide gas. The sinks in the yard are all in a horribly filthy condition waiting orders from head quarters to clean themselves. These barracks stand on made ground, with no basement but a cellar 5 feet deep, without ventilation. The agent's name is Jacob Covert, who lets the rooms and collects the rent, which average \$4.00 per month for each apartment. The whole are in a very dilapidated condition."

"Next in order is Mechanics' court, rear of 94 Goerck street, a building in shape of letter L.; 40 feet front on Goerck street. The entrance to the yard is 6 feet wide; 4 stories high with balconies to three stories, running the entire length. The entrance to all the upper stories is by one stair-way, 3½ feet wide. The sink for the accommodation of all is 3 stories high, with 12 apart-

ments. There is an under cellar for wood and coal, 5 feet deep and damp, being on made ground. No proper ventilation; all filthy. Height of ceiling 7 feet; roof in a leaky condition. In case of fire there is no way of escape but to jump into the yard. Inhabited by Germans and Irish, 20 families in all, 93 persons, dogs 4, cats 6. These premises belong to the Widow C——; agent Stephen Jones; average monthly rent \$4.00."

Of the row of five rear double houses in Rivington street, Dr. Guernsey states: "In the year 1849, I remember that 42 individuals died here in three weeks, of cholera, and not one recovered that was taken sick. The reasons are plain; they have no ventilation, and the houses being double, the exhalations from one apartment are inhaled by the other."

"Next in order comes 'Rag Picker's Row' and bone repository. This nuisance should be destroyed. It is situated in the rear of Nos. 84, 86, 88, 90, 92, 94 and 96 Sheriff street. The houses are of wood, two stories with attic and basement. The attic rooms are used to deposit the filthy rags and bones as they are taken from the gutters and slaughter houses. The yards are filled with dirty rags hung up to dry, sending forth their stench to all the neighborhood, and is exceedingly nauseous, operating upon me as an emetic. The tenants are all Germans of the lowest order, having no national or personal pride; they are exceedingly filthy in person, and their bed clothes are as dirty as the floors they walk on; their food is of the poorest quality, and their feet and heads, and doubtless their whole bodies, are anasarcons, suffering from what they call rheumatism, but which is in reality a prostrate nervous system, the result of foul air, and inadequate supply of nutritious food. They have a peculiar taste for the association of dogs and cats, there being about 50 of the former and 30 of the latter. The whole number of apartments is 32, occupied by 28 families, number 120 in all, 60 adults and 60 children. The yards are all small and the sinks running over with filth. The owner of one-half of this row is named Henry Greffelman, and of the other Christopher Sneider. The latter gentleman is a wealthy man and lives with his tenants in the rear, although he owns the front house; he prefers the filth because he thus saves some money. He buys and sells rags, a perfect *chiffonier*. Not one decent sleeping apartment can be found on the entire premises, and not one stove properly arranged. The carbonic acid gas, in conjunction

with the other emanations from the bones, rags and human filth, defies description. Average rent of apartments \$3.50 a month. The rooms are 6×10 feet, bedrooms 5×6 feet. It will be noticed that there are very few children in all these tenement houses, the reason being that the offspring of such parents have only a small amount of vitality; with but a vegetable existence, they either wither under the scorching sun of summer, or chill to death in the winter."

APPENDIX.

(B.)

DOMICILIARY ACCOMMODATIONS IN THE CITY OF NEW YORK.

At a regular meeting of the Sanitary Association, held on the second day of June, 1859, Mr. Halliday submitted a report from the select committee on domiciliary accommodations, of which the following are extracts :

Domiciliary Accommodations of the city.

Three years since, the whole number of buildings, of all descriptions, in this city, was some fifty-three thousand; this includes, of course, buildings occupied exclusively as stores, and all public buildings, churches, etc. Some of the lower wards are nearly occupied by stores. The city is divided into twenty-two wards. In 1856, nineteen of these wards contained a population of 535,027 inhabitants, divided into 112,833 families, averaging a little less than 5 souls in each family. For the accommodation of these 112,833 families, residing in nineteen wards, there were 36,088 dwellings, averaging about three families to each dwelling. There are but 12,717 of those families occupying an entire house; 7,148 of these dwelling contains two families; 4,600 contain each three families. Thus, while 24,465 of these dwellings shelter but 36,213 families, the remaining 13,623 houses have to cover 76,620 families, averaging nearly six families to each house. Showing that about three-fourths of the whole population of New York live averaging but a fraction less than six families in a house, while only about one family in ten occupy a whole house. The following table will show how the families are apportioned to these dwellings :

NO. HOUSES.			NO. HOUSES.		
Containing	1 family,	12,717	Containing	23 families,	5
"	2 families,	7,147	"	25 "	9
"	3 "	4,600	"	26 "	26
"	4 "	3,256	"	27 "	1
"	5 "	2,055	"	28 "	1
"	6 "	1,060	"	29 "	1
"	7 "	1,487	"	30 "	4
"	8 "	1,444	"	32 "	2
"	9 "	355	"	34 "	1
"	10 "	556	"	35 "	2
"	11 "	175	"	36 "	3
"	12 "	277	"	37 "	1
"	13 "	300	"	38 "	1
"	14 "	169	"	40 "	1
"	15 "	90	"	42 "	1
"	16 "	289	"	43 "	1
"	17 "	58	"	45 "	2
"	18 "	63	"	48 "	1
"	19 "	19	"	50 "	1
"	20 "	160	"	54 "	1
"	21 "	9	"	56 "	1
"	22 "	28	"	57 "	1
"	23 "	5	"	87 "	1
"	24 "	58	"	94 "	1

There are many single blocks of dwellings, containing nearly twice the number of families residing on the whole of Fifth avenue; or than a continuous row of dwellings similar to those on the Fifth avenue, three or four miles in length. There is a multitude of these squares, any ten of which contains a larger population than the whole of the city of Hartford, which covers an area of several miles. In 1850, the entire population of this city was 515,394. Number of families, 93,608. Whole number of dwellings, 37,677.

Philadelphia, in 1850, contained a population of 408,752, divided into 72,392 families. To accommodate these families, there were 61,278 dwellings. With a population 107,000 smaller than New York, Philadelphia had 32,601 more dwellings.

Baltimore, in 1850, with a population of 210,646 in 94,925 families, had 30,065 dwellings.

Boston, in 1850, had a population of 146,881. Chelsea, a suburb of Boston, had a population of 7,236. Boston and Chelsea included had 25,415 families, and 16,567 dwellings.

The extreme value of land in New York makes tenement houses a necessity. They have sprung up within a few years, and have now become so numerous, and the amount of capital invested in

them is so enormous, and the interest paid to the owners in the shape of rent is so great, that it may be almost an impossibility to accomplish any reform. In one case, where the establishment is arranged for the accommodation of one hundred and twenty-six families, the rates charged, if the tenements were all occupied, would not be less than twenty-five or thirty per cent on the first cost, so that some five years would suffice to pay principal and interest. This building stands on a plot of ground perhaps 50×250 feet. There is an alley on each side, running the whole depth and some eight feet in width. Our tenement buildings are almost invariably so constructed as to make even tolerable ventilation entirely out of the question. A current of fresh air can never be passed through them after they are finished. Each tenement very generally consists of a room and bed-room. The buildings three to six stories high, with two or more families on each floor or story. In this one room the family sit, do all their work, cook, wash and eat. Disgusting as some of these details are, the influence both on the health and morals of the people cannot be properly estimated in the absence of these details. I am no longer surprised at developments of wickedness in our midst, when I see how the masses live. The large tenement house alluded to above, is occupied principally by foreigners, but not of the lowest class; most of them, with different surroundings, would make themselves appear respectable; but look at a single fact in connection with the accommodations offered to these families, where they pay thirty-five per cent on the money which their tenement costs. The alley-ways at the sides of these houses, are excavated to the depth of the cellars of the house, say nine feet, an arch thrown over and covered with flag-stones. Directly through the whole length of this excavation or vault, is an open drain connected with the street sewer, the water always standing with but very little current. Along one side the whole length of this vault, are arranged the water-closets used in common by this horde of families. They should be called stalls rather than closets, for there is not a door connected with this whole establishment; there is an opening from each division of the cellar into this vault, the vault being lighted by openings a few feet apart, covered with iron grating such as, or similar to those upon sidewalks. The filth and odor of this place are awful. And yet these are the only accommodations offered to hundreds of women and children, amid filth such as no decent farmer would drive his swine into, and where there is little more retiracy than upon a public common.

Where there are such beastly arrangements as these, how can they develop other than a beastly morality? Nor need it be a wonder that more people die in New York, than in almost any other city on the face of the globe. Our tenements for the masses are so constructed as to shut out the light, and make ventilation an impossibility, while the surroundings without are made to combine the very elements of death. They have but two windows for light and air, and only one to each room; these look out against a solid brick wall eight feet from them, and upon this alley way the odors arising from the horrid vault beneath mingle with every inhalation these poor creatures make. Nearly all of our tenement houses are open to these very strictures; not, I will admit, to so great an extent, yet the state of things is such as to make death a certainty to most of the poor babes whose lungs inhale their atmosphere. No one will wonder who goes through these houses, only as he shall wonder that all, old and young, do not die. If this city were not more favorably located for health than almost any other city on earth, almost nobody would live here. Let the same state of things exist in New Orleans, and it would be decimated at once, and so would London. But terrible as the physical aspect is, the moral state of the picture is utterly appalling. What will be the moral condition of New York thirty years hence? is a question that ought to be pondered soon, if we would not be engulfed. I was in the city during the whole period of the first cholera. With a population of two hundred and twenty thousand, the deaths ran up from about six thousand the year previous, to more than ten thousand six hundred, notwithstanding that more than one-half of the population left the city during the prevalence of the epidemic. Then the disease selected as spots where it would run riot, were there were the most crowded neighborhoods. The block in Laurens street, between Broome and Grand, was most terribly scourged. I very well remember entering one of the houses the morning the sixteenth corpse was carried out, and notwithstanding the terrible mortality there, it would bear no comparison to the present dense crowded state of our tenant houses. In 1832, there was only here and there a place which seemed so particularly to invite the disease. Now, these plague-inviting neighborhoods are everywhere. Then, the mass of the people of New York could leave for more healthy localities. Now, if cholera or yellow-fever gain a foot-hold, they must stay and die, as they could not, on account of poverty, leave. Let the cholera return here with the same virulence as at its first visit, and what

could prevent the death of hundreds of thousands of people in ten weeks, which was about the time it prevailed then. Scenes I then witnessed by day and by night, can hardly ever fade from my memory; but I candidly believe that, from the altered condition of our people in regard to their domiciliary accommodations, and from their deeper poverty being compelled to stop here, the mortality would be most horribly increased.*

*The facts contained in this valuable report of Mr. Halliday, are contained in a volume since published by that gentleman, under the title of "*Lost and Found.*"